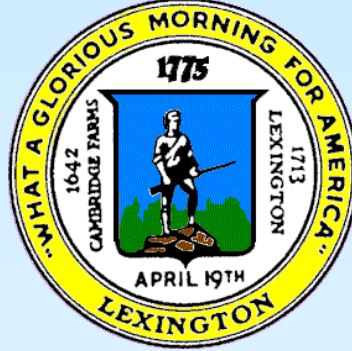


Town of Lexington



Water and Wastewater Rate Setting – Public Hearing

Fiscal Year 2023

October 3, 2022



FY2022 Budget - Operating Results - Water Fund

	2022 Budget	2022 Actuals	Favorable/ (Unfavorable)
Revenues			
User Charges	\$ 12,316,466	\$ 10,892,419	\$ (1,424,047)
Non-Rate Revenue	\$ 308,000	\$ 494,264	\$ 186,264
Water Enterprise Total Revenues	\$ 12,624,466	\$ 11,386,683	\$ (1,237,783)
Expenses			
Total Direct Costs	\$ 11,706,221	\$ 11,447,256	\$ 258,965
Total Indirect Costs	\$ 918,245	\$ 918,245	\$ -
Water Enterprise Total Expenses	\$ 12,624,466	\$ 12,365,501	\$ 258,965
<i>FY2022 Surplus (Deficit)</i>			\$ (978,818)

Retained Earnings History

	Certified as of 6/30/2018	Certified as of 6/30/2019	Certified as of 6/30/2020	Certified as of 6/30/2021	Projected Retained Earnings as of 6/30/2022
Water Enterprise	\$ 1,612,998	\$ 1,346,448	\$ 1,737,914	\$ 3,537,851	\$ 769,999

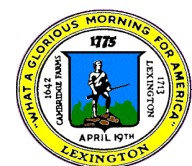


FY2022 Budget - Operating Results - Wastewater Fund

	<u>2022 Budget</u>	<u>2022 Actuals</u>	<u>Favorable/ (Unfavorable)</u>
Revenues			
User Charges	\$ 10,841,270	\$ 10,831,707	\$ (9,563)
Non-Rate Revenue	\$ 362,000	\$ 469,921	\$ 107,921
Wastewater Enterprise Total Revenues	\$ 11,203,270	\$ 11,301,628	\$ 98,358
Expenses			
Total Direct Costs	\$ 10,689,159	\$ 10,305,077	\$ 384,082
Total Indirect Costs	\$ 514,111	\$ 514,111	\$ -
Wastewater Enterprise Total Expenses	\$ 11,203,270	\$ 10,819,188	\$ 384,082
<i>FY2022 Surplus (Deficit)</i>			\$ 482,440

Retained Earnings History

	<u>Certified as of 6/30/2018</u>	<u>Certified as of 6/30/2019</u>	<u>Certified as of 6/30/2020</u>	<u>Certified as of 6/30/2021</u>	<u>Projected Retained Earnings as of 6/30/2022</u>
Wastewater Enterprise	\$ 1,521,373	\$ 995,546	\$ 1,297,665	\$ 2,565,157	\$ 1,807,854



Town of Lexington

Select Board– October 3, 2022

Consumption History and Estimates

WATER CONSUMPTION HISTORY FY2016 thru FY2022

(in hundred cubic feet(HCF))

(1)	DESCRIPTION	TIER	HCF RANG E	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	A		10 Year Average	5 Year Average	B	(B-A)/A % change FY23 vs FY22 Budget
										FY2022	Estimates for FY22 Rates			Estimates for FY23 Preliminary Rates	
(2)	WATER	TIER 1	0-40	664,407	678,913	660,903	644,456	635,458	688,356	642,648	660,000	664,763	654,364	650,000	(1.5)%
(3)		TIER 2	41-80	107,531	120,883	91,895	90,091	84,705	124,119	82,313	90,000	101,669	94,625	87,000	(3.3)%
(4)		TIER 3	80+	237,070	231,490	221,151	194,533	190,371	172,745	180,313	190,000	209,975	191,823	188,000	(1.1)%
(5)		TOTAL		1,009,008	1,031,286	973,949	929,080	910,534	985,220	905,274	940,000	976,407	940,811	925,000	(1.6)%
(6)	WATER - MUNICIPAL	FLAT RATE		38,600	63,263	29,825	31,826	23,641	35,908	23,634	30,000	31,380	28,967	29,000	(1.6)%
(7)	WATER-IRRIGATION	TIER 3		386,065	477,864	326,750	339,772	% change FY23 vs FY22 Budget	504,998	330,409	370,000	351,248	361,695	370,000	—%
(8)	WATER BEDFORD	FLAT RATE		687,019	696,163	616,099	657,483		772,132	750,662	660,000	700,342	710,653	680,000	3.0%
(9)	WATER - VA HOSPITAL	FLAT RATE		29,404	32,893	28,756	24,444		5,913	14,809	8,000	25,045	17,054	10,000	25.0%
(10)	HANSCOM/ LINCOLN LABS	110+111		227,665	248,605	238,436	234,333	227,734	167,408	69,641	207,000	213,995	187,510	107,000	(48.3)%
(11)	WATER- BURLINGTON	FLAT RATE		—	10,936	4,595	—	2,883	—	—	—	2,971	1,496	—	
(12)	TOTAL WATER			2,377,761	2,793,638	2,218,410	2,216,938	2,239,579	2,471,579	2,094,429	2,215,000	2,301,388	2,248,187	2,121,000	(4.2)%
(13)	SEWER	TIER 1	0-40	655,115	670,008	652,510	636,342	627,872	680,647	635,775	652,000	655,727	646,629	643,000	(1.4)%
(14)		TIER 2	41-80	105,028	118,482	90,185	88,283	83,318	121,881	80,865	88,000	99,442	92,906	85,000	(3.4)%
(15)		TIER 3	80+	234,697	232,394	217,533	192,973	189,217	170,119	178,642	188,000	207,697	189,697	186,000	(1.1)%
(16)		TOTAL		994,840	1,020,884	960,228	917,598	900,407	972,647	895,282	928,000	962,867	929,232	914,000	(1.5)%
(17)	SEWER- MUNICIPAL	FLAT RATE		14,724	14,168	11,558	10,511	11,349	8,683	11,808	10,000	12,099	10,782	10,000	—%
(18)	TOTAL SEWER			1,009,564	1,035,052	971,786	928,109	911,756	981,330	907,090	938,000	974,965	940,014	924,000	(1.5)%
(19)	GRAND TOTAL			3,387,325	3,828,690	3,190,196	3,145,047	3,151,335	3,452,909	3,001,519	3,153,000	3,276,353	3,188,201	3,045,000	(3.4)%



DESCRIPTION	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	A		10 Year Average	5 Year Average	B Estimates for FY23 Preliminary Rates	(B-A)/A % change FY23 vs FY22 Budget
							FY2022	Estimates for FY22 Rates				
HANSCOM/ LINCOLN LABS	227,665	248,605	238,436	234,333	227,734	167,408	69,641	207,000	213,995	187,510	107,000	(48.3)%
TOTAL WATER	2,377,761	2,793,638	2,218,410	2,216,938	2,239,579	2,471,579	2,094,429	2,215,000	2,301,388	2,248,187	2,121,000	(4.2)%
Hanscom % of System	10%	9%	11%	11%	10%	7%	3%	9%	9%	8%	5%	

- The average consumption at Hanscom AFB from 2011-2020 was approximately 240,000 HCF, or 9% of the total Lexington water system.
- During FY2021, the year primarily impacted by the pandemic, water usage at Hanscom was down 30% from pre-pandemic usage.
- In FY2022 usage dropped an additional 58%, to 69,641 HCF. This is an overall decrease of 70% compared to the pre-pandemic average, and represents only 3% of the total Lexington water system.

Massachusetts Water Resources Authority

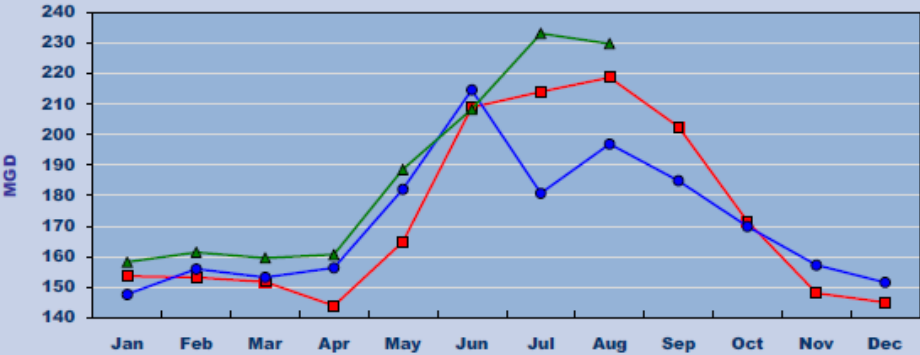
Town of Lexington Water Use

Lexington Water Use						
	CY2020		CY2021		CY2022	
	MG	MGD	MG	MGD	MG	MGD
Jan	129.4	4.17	119.1	3.84	120.9	3.90
Feb	115.1	3.97	113.2	4.04	106.6	3.81
Mar	126.0	4.06	120.7	3.89	117.7	3.80
Apr	121.3	4.04	125.5	4.18	117.4	3.91
May	173.4	5.59	181.6	5.86	179.6	5.80
Jun	242.9	8.10	229.7	7.66	220.6	7.35
Jul	225.1	7.26	179.3	5.78	256.6	8.28
Aug	233.9	7.54	211.9	6.84	255.1	8.23
Sep	215.7	7.19	175.9	5.86	0.0	0.00
Oct	174.1	5.61	148.2	4.78	0.0	0.00
Nov	124.9	4.16	117.1	3.90	0.0	0.00
Dec	116.0	3.81	113.0	3.64	0.0	0.00
YTD Total*	1,367.0		1,281.1		1,374.5	
Annual Total	1,999.7		1,835.2		1,374.5	
YTD Average*		6.42		6.04		5.66
Annual Average		5.46		5.03		5.66

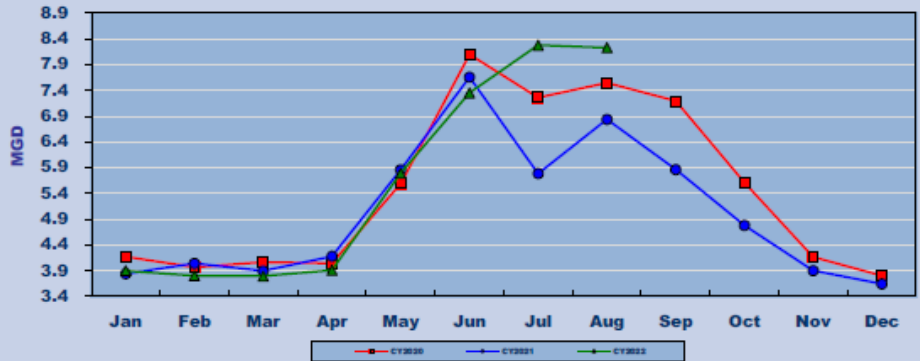
Flow Change from Prior Year	CY2020		CY2021		CY2022	
	YTD*	Annual	YTD*	Annual	YTD*	Annual
	9.4%	7.0%	-6.3%	-8.2%	7.3%	TBD

MWRA Metro System Water Use (MG)	43,016	63,348	42,176	62,404	45,637	45,637
Lexington's Share of System Water Use	3.18%	3.16%	3.04%	2.94%	3.01%	TBD

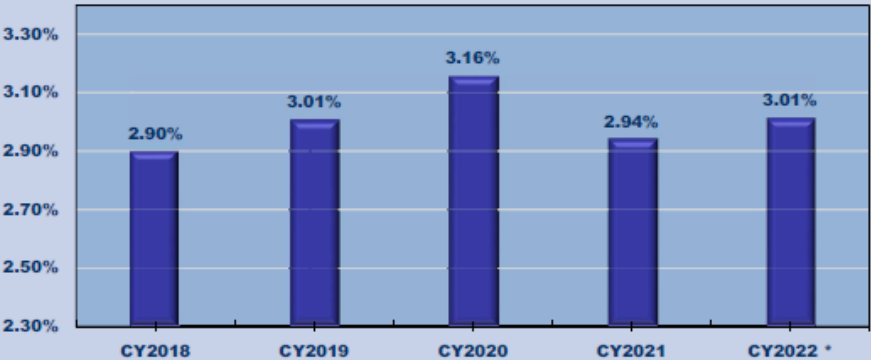
MWRA Metro-System Water Use



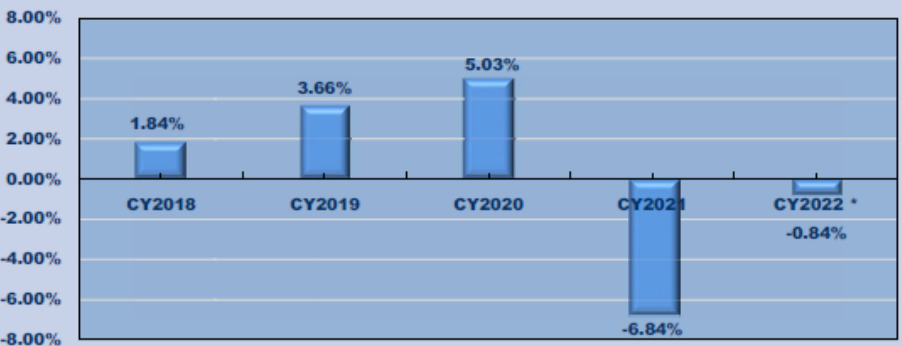
Lexington Water Use



Lexington System Share



Change in System Share



* Based on YTD water use through August. FY2024 water assessments will be based on share of water use through December 2022. All flows are preliminary and subject to change following MWRA and community review.



$$\text{Proposed 2023 rates} = \frac{\text{FY2023 Water Enterprise Budget}}{\text{FY2023 Projected Water Usage}}$$

Water Enterprise Budget Summary

	FY2022 Final Budget	FY2023 Revised Budget (Proposed)*	\$ Change	% Change
Compensation	\$ 865,454	\$ 875,670	\$ 10,216	1.2 %
Operating Expenses	\$ 514,300	\$ 533,500	\$ 19,200	3.7 %
Cash Capital	\$ 400,000	\$ 600,000	\$ 200,000	50.0 %
Debt	\$ 1,179,794	\$ 1,224,746	\$ 44,952	3.8 %
MWRA	\$ 8,743,912	\$ 8,493,467	\$ (250,445)	(2.9)%
OPEB	\$ 2,761	\$ 2,761	\$ —	
Indirect Costs	\$ 918,245	\$ 977,093	\$ 58,848	6.4 %
Water Enterprise Total Expenses	\$ 12,624,466	\$ 12,707,237	\$ 82,771	0.7 %

* There are no proposed changes to the FY2023 Water Enterprise budget for the Fall 2022 STM– the MWRA assessment remains unchanged from the preliminary estimate approved at ATM.

Budget Sensitivity: +/- \$100K = approx. 1%



$$\text{Proposed 2023 rates} = \frac{\text{FY2023 Wastewater Enterprise Budget}}{\text{FY2023 Projected Wastewater Output}}$$

Wastewater Enterprise Budget Summary

	FY2022 Final Budget	FY2023 Revised Budget (Proposed)*	\$ Change	% Change
Compensation	\$ 389,779	\$ 399,848	\$ 10,069	2.6 %
Operating Expenses	\$ 454,650	\$ 458,400	\$ 3,750	0.8 %
Cash Capital	\$ 200,000	\$ 300,000	\$ 100,000	50.0 %
Debt	\$ 1,464,513	\$ 1,595,417	\$ 130,904	8.9 %
MWRA	\$ 8,177,213	\$ 8,432,792	\$ 255,579	3.1 %
OPEB	\$ 3,004	\$ 3,004	\$ —	
Indirect Costs	\$ 514,111	\$ 542,416	\$ 28,305	5.5 %
Wastewater Enterprise Total Expenses	\$ 11,203,270	\$ 11,731,877	\$ 528,607	4.7 %

* Reflects proposed budget adjustment at Fall 2022 STM for final MWRA assessment

Budget Sensitivity: +/- \$100K = approx. 1%



PROPOSED FY2023 RATES

Residential / Commercial / Industrial	FY22 Water Rates	Proposed FY23 Water Rates	% Change	FY22 Wastewater Rates	Proposed FY23 Wastewater Rates	% Change
Tier 1	\$4.75	\$5.07	6.7%	\$8.77	\$9.33	6.4%
Tier 2	\$7.12	\$7.60	6.7%	\$14.32	\$15.24	6.4%
Tier 3	\$9.40	\$10.04	6.8%	\$22.77	\$24.23	6.4%
irrigation	\$9.40	\$10.04	6.8%	NA	NA	NA
municipal	\$3.27	\$3.46	5.8%	\$3.68	\$3.68	0.0%
Hanscom/Lincoln Labs	\$7.00	\$7.48	6.9%	NA	NA	NA
VA Hospital	\$8.37	\$8.94	6.8%	NA	NA	NA
Bedford-water	\$3.30	\$3.49	5.8%	NA	NA	NA
Flat Sewer Rate (annual)	NA	NA	NA	\$401.38	\$427.01	6.4%

Annual Impact of Proposed Rates on Low/Average/High Users

	\$ Change- Combined Water/ Wastewater	% Change
50 HCF (low user)	\$44.00	6.5%
70 HCF (Average Lexington SFH)	\$61.60	6.5%
120 HCF (average user)	\$126.40	6.5%
240 HCF (high user)	\$350.40	6.5%



Annual Water/Sewer Charges for Household Using 120 HCF/Year

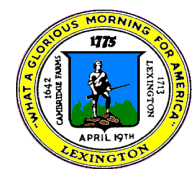
	Water	Sewer	Total	\$ Change from Prior Year	% Change from Prior Year
FY2023	\$ 709.60	\$ 1,356.00	\$ 2,065.60	\$ 126.40	6.5%
FY2022	\$ 664.80	\$ 1,274.40	\$ 1,939.20	\$ 112.00	6.1%
FY2021	\$ 615.60	\$ 1,211.60	\$ 1,827.20	\$ 69.60	4.0%
FY2020	\$ 573.60	\$ 1,184.00	\$ 1,757.60	\$ 120.00	7.3%
FY2019	\$ 554.00	\$ 1,083.60	\$ 1,637.60	\$ 96.40	6.3%
FY2018	\$ 544.40	\$ 996.80	\$ 1,541.20	\$ 20.80	1.4%
FY2017	\$ 526.40	\$ 994.00	\$ 1,520.40	\$ 40.77	2.8%
FY2016	\$ 501.96	\$ 977.67	\$ 1,479.63	\$ (28.37)	-1.9%
FY2015	\$ 483.20	\$ 1,024.80	\$ 1,508.00	\$ 27.20	1.8%
FY2014	\$ 463.60	\$ 1,017.20	\$ 1,480.80	\$ 24.00	1.6%
FY2013	\$ 448.00	\$ 1,008.80	\$ 1,456.80	\$ 49.48	3.5%
FY2012	\$ 436.79	\$ 970.52	\$ 1,407.32	\$ 157.28	12.6%
FY2011	\$ 411.60	\$ 838.44	\$ 1,250.04	\$ 9.64	0.8%
FY2010	\$ 407.60	\$ 832.80	\$ 1,240.40	\$ (48.80)	-3.8%
FY2009	\$ 415.60	\$ 873.60	\$ 1,289.20		

Average Annual Change: FY2009 to FY2022

3.2%

Annual Water/Sewer Charges for Household Using 70 HCF/Year

	Water	Sewer	Total	\$ Change from Prior Year	% Change from Prior Year
FY2023	\$ 354.90	\$ 653.10	\$ 1,008.00	\$ 61.60	6.5%
FY2022	\$ 332.50	\$ 613.90	\$ 946.40	\$ 54.60	6.1%
FY2021	\$ 308.00	\$ 583.80	\$ 891.80	\$ 34.30	4.0%
FY2020	\$ 287.00	\$ 570.50	\$ 857.50		



Rates for Communities Receiving Water and Sewer Services from MWRA*

Community	Water		Sewer		Combined
Everett	\$	291.60	\$	793.20	\$ 1,084.80
Waltham	\$	407.28	\$	715.32	\$ 1,122.60
Malden	\$	682.08	\$	797.76	\$ 1,479.84
Boston	\$	735.58	\$	1,010.01	\$ 1,745.59
Chelsea	\$	656.40	\$	1,136.40	\$ 1,792.80
Brookline	\$	667.04	\$	1,135.76	\$ 1,802.80
Norwood	\$	765.24	\$	1,041.12	\$ 1,806.36
Watertown	\$	618.00	\$	1,213.20	\$ 1,831.20
Medford	\$	860.40	\$	1,073.28	\$ 1,933.68
Lexington	\$	664.80	\$	1,274.40	\$ 1,939.20
Revere	\$	487.20	\$	1,470.00	\$ 1,957.20
Arlington	\$	939.92	\$	1,094.12	\$ 2,034.04
Framingham	\$	900.36	\$	1,134.72	\$ 2,035.08
Quincy	\$	866.40	\$	1,232.28	\$ 2,098.68
Stoneham	\$	834.00	\$	1,320.00	\$ 2,154.00
Somerville	\$	733.52	\$	1,500.12	\$ 2,233.64
Melrose	\$	931.60	\$	1,439.12	\$ 2,370.72
Milton	\$	894.48	\$	1,481.04	\$ 2,375.52
Newton	\$	967.80	\$	1,486.20	\$ 2,454.00
Belmont	\$	877.88	\$	1,622.20	\$ 2,500.08
Reading	\$	1,308.00	\$	1,308.00	\$ 2,616.00
Winthrop	\$	1,419.00	\$	1,419.00	\$ 2,838.00

*Data from MWRA Advisory Board's 2021 Annual Rate Survey, based on average annual household use of 120 HCF (FY2022 or most recently published).